

Small Business Economic Impact Statement for Amendment to Chapter 173-505 WAC Instream Resources Protection Program Stillaguamish River Basin Water Resources Inventory Area (WRIA 5)

Department of Ecology

February 2005 # 05-11-009

Small Business Economic Impact Statement

For

Amendment to Chapter 173-505 WAC

Instream Resources Protection Program

Stillaguamish River Basin

Water Resources Inventory Area

(WRIA 5)

Prepared by:

Washington State Department of Ecology

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Small Business Economic Impact Statement For Chapter 173-505 WAC Instream Resources Protection and Water Resources Program Stillaguamish River Basin Water Resources Inventory Area (WRIA) 5

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BACKGROUND

The Washington State Department of Ecology's (Ecology) Water Resources Program is proposing to develop an instream resources protection and water resources program for the Stillaguamish River basin to:

- Retain perennial rivers, streams, and lakes in the Stillaguamish River basin with instream flows and levels necessary to protect and preserve instream values, and instream flows. Closures are proposed along with numeric instream flows at specific points in the basin.
- Provide for an adequate and safe supply of potable water to satisfy the domestic needs of households and small businesses and for stockwatering via the establishment of two reservations of water.
- State Ecology's policies to guide the protection, utilization and management of Stillaguamish River basin surface water and interrelated groundwater resources for use in future water allocation decisions.

The Stillaguamish River Basin is designated as Water Resource Inventory Area 5 (WRIA 5) in chapter 173-500 Washington Administrative Code (WAC). The proposed rule is chapter 173-505 WAC. Ecology is developing and issuing this Small Business Economic Impact Statement (SBEIS) as part of its rule adoption process and pursuant to chapter 19.85 RCW. Ecology intends to use the information developed in the SBEIS to ensure that the proposed rule is consistent with legislative policy.

DESCRIPTION AND PURPOSE OF THE SBEIS

The objective of this SBEIS is to identify and evaluate the various requirements and costs that the proposed rule might impose on business. In particular, the SBEIS examines whether the costs on businesses that might be imposed by the proposed rule impose a disproportionate impact on the State's small businesses. The specific purpose/required contents of the SBEIS can be found in RCW 19.85.040.

1. COMPLIANCE COSTS FOR WRIA 5 BUSINESSES INTRODUCTION

The evaluation of the impacts of the proposed rule is based on analysis and comparison of water right management without the rule and after the effective date of the rule if the

rule is adopted. The current water right administration is based on an extensive and complex legal and administrative framework. The framework includes administrative procedures for applications for both new water rights and changes to exiting water rights, and the use of water by permit-exempt wells (RCW 90.44.050). Implementation of Chapter 90.22 RCW and Chapter 90.54 RCW are also part of this legal baseline. In proposing reservations of water, and closing streams and rivers, the rule creates new conditions that must be considered when making future water right decisions. A brief description of compliance requirements is provided below. A detailed description of water management under the existing and proposed rules can be found in Appendix B.

WATER RIGHT ADMINISTRATION UNDER THE RULE

The proposed future water right management program will close rivers and streams and reserve specific quantities of groundwater in specific rivers and streams, for year-round future domestic uses of households and businesses. The rule also creates a reservation for future stockwatering and establishes eligibility conditions for use of the reservations. Expected impacts to water management include the following:

<u>Surface Water:</u> For streams with flows available at least part of the year, the decision process will be much the same as prior to the rule. Currently, Ecology will condition a water right in such a way that flows are protected and a permit can be approved granting an interruptible right. Under the proposed rule, all new surface water rights will be required to stop withdrawing during the closed periods or when minimum instream flows are not met in the surface water source. In general, this may represent a significant change for future proposed surface water withdrawals since currently they would only be required to stop withdrawing water during low flow periods. Those proposing withdrawals from lakes or ponds will only be allowed to withdraw up to 150 gallons per day for in-house use only which will likely be a reduction from what would be obtained absent the rule.

Applications for new consumptive surface water rights during the closure periods would be denied, unless the applicant proposes, and Ecology accepts, mitigation of the water use or an interruptible right is acceptable to the applicant. An uninterruptible right may be approved on a case-by-case basis. For areas currently included in Ecology's Surface Water Source Limitations (SWSL) list, about 30% of the basin, the proposed rule would represent little change from the current situation except for those obtaining water from the reservation. Proposed appropriation from a stream listed in the SWSL are currently either denied or conditioned on low flow requirements. However, for areas that are not currently included in SWSL, this may represent a change because potential water right holders would have to cease use of water every year instead of just during the low-flow closure periods as would be the case for a conditioned right. In accordance with the requirements of RCW 90.22.040, Ecology is retaining a minimum flow not to exceed 1 CFS for future stockwatering from surface water sources.

<u>Groundwater:</u> The decision process is much the same as prior to the rule. Groundwater applications in hydraulic continuity with the rivers and streams in the Stillaguamish basin would still be subject to the instream flows unless they are eligible for the domestic

reservation. Applications for new consumptive ground water rights from sources that are closed part of the time would be approved as interruptible rights or denied, unless the applicant proposes, and Ecology accepts, mitigation of the water use or the applicant shows that the withdrawals will not affect surface water. An uninterruptible right may be approved on a case-by-case basis. For areas currently listed under Ecology's SWSL list, this would represent no change from the current situation except for those obtaining water from the reservation. However, for those areas that are not currently listed on the SWSL this may represent a change because they would not be able to use water in areas with year-around closures and will likely be required to curtail use more frequently in those cases where closures are only part of the year.

Based on the hydrogeology of the basin, and the location and depth where groundwater withdrawals generally occur, future groundwater withdrawals have a high likelihood of capturing water that would result in impacts to surface water flows and levels in the Stillaguamish River Basin. Therefore groundwater sources are presumed to be connected with surface waters in the proposed rule. The rule does not create the need for, and does not change the standards for, the analysis regarding whether these impacts cause impairment.

<u>Permit Exempt Groundwater:</u> A reservation of ground water for future domestic uses provides a management framework for these types of withdrawals. One significant factor influencing the impacts of the rule is whether the local governments implement an administrative action or ordinance regarding the reservation. If an administrative action or an ordinance is not put in place, the reservation will not be available to new uses until such time as these actions are taken. The analysis below assumes the local governments act to make the reservations available within their jurisdictions. Appendix C discusses the case where action is not taken.

For businesses interested in using an exempt well, there would be several alternatives. Applicants could solicit a hydrogeologist to certify that a well would not cause impairment of a water right in areas where hydraulic continuity between the surface water and groundwater is not likely. Ecology would have to approve this certification. This would allow an applicant to develop a well as though the rule was not in place, but at the additional cost of the analysis. For some wells in basins that drain groundwater to saltwater bodies, this cost would likely be very small. For wells that would be drilled in areas where they are likely to be in hydraulic continuity with closed basins or streams with instream flows, and impairment would result, options include obtaining water from the reservation or accepting an interruptible water right in partially closed basins with corresponding curtailment or required storage, or agreeing to mitigate the impacts.

The reservation is available only to an applicant located more than 500 feet from an existing water system. If applicants are closer to the water system than this and within the service area, they will be required to connect to the system when connection can be made in a timely and reasonable manner. This may result in increased costs, including connection charges, construction charges and monthly water rates. Those that access the reservation via exempt wells near an expanding water system will be required to connect

to the system if connection becomes timely and reasonable. For stockwater, Ecology is reserving 2 acre-feet of groundwater, limited to 5,000 GPD per user.

<u>Changes or Transfers of Water Rights</u>: Existing water rights can continue to be changed or transferred as permitted by Chapters 90.03 and 90.44 RCW and the process is the same as before the proposed rule. However, under the current system, changes for surface water rights cannot consider impairment of instream flows since there is no instream flow right. The proposed rule will change this and make it a consideration in a proposed transfer. Requirements related to changes in the point of diversion from a surface point to a ground water source or transfers that are restricted within the same source could also be impacted as above.

<u>Reservations of water</u>: The reservations of water, use of water under the reservations, and associated conditions for that use, are all part of the rule proposal. In large measure, the domestic reservation will allow residential and some business development to continue as before with the benefit of having a continuous, reliable source of water during low flow periods, with few restrictions. These restrictions include a limit on outside watering, a requirement to connect to public water systems under certain circumstances, and the finite quantity of the reservation. Domestic water use must also meet efficiency standards but this is not a change from existing requirements. The stockwatering reservation will provide uninterruptible water supplies for those types of businesses.

<u>Closures of Water Sources in WRIA 5</u>: The rule would include the current limitations for surface water sources, and add several other streams and rivers. For applicants who cannot access the reservations, applications for consumptive uses from sources closed during certain portions of the year will be denied unless the applicant can acceptably mitigate for the impacts during the closure periods or demonstrate to the satisfaction of the department that the proposed withdrawal will not affect instream flows set by rule. In partially open areas, interruptible water rights may be issued.

IMPACTS TO BUSINESSES IN WRIA 5

Several potentially significant impacts to businesses in WRIA 5 are likely and are described below:

1. Lake and pond consumptive withdrawal restrictions: Surface withdrawals from all lakes and ponds will be limited to single in-house domestic uses not to exceed 150 gallons per day per home under the proposed rule. Currently, applicants would likely get a right to a larger quantity of water but be required to reduce use to in-house domestic during low flow conditions in the distributary. The in-house use only limitation under the rule may impact some businesses desiring access to these sources or develop residential lots. However, businesses might be able to get a slightly greater quantity of groundwater from the proposed reservations. The exact impact of these restrictions on use from lakes and ponds will depend on the number of permit requests that would have been submitted absent the rule, and the required water needs.

2. Stream closures: All rivers and streams and the groundwater in continuity with them that are currently open to new withdrawals (or currently listed in SWSL) will be closed. For other than domestic uses (human needs of a household or business) and stockwatering authorized under the reservations, this requirement will generally eliminate new water withdrawals during the year (in fully closed areas) or part of the year (in partially closed basins).

Domestic uses will be allowed in these closed areas through the proposed reservation but only for domestic needs. New withdrawals may still be available when non-consumptive, fully mitigated during closure periods, or from groundwater shown to not affect surface water. In some areas, water uses not eligible for the reservation will be required to obtain water during closure periods from an existing water purveyor, through leases or transfers or through other methods. For those businesses that require water for irrigation or for agricultural/industrial processes, this might be an impact on future withdrawals since the closure will require some mitigation or storage. However, it is reasonable to conclude that these water uses would have been conditioned on low flows absent the rule. As such, the impact would likely be a longer period of non-use that will occur every year instead of just low flow years. This could require water leasing or transfers of existing water rights or could lead to a change in the proposed location of a commercial industry or agricultural use. The magnitude of the impact will be determined by the proposed location and use of future water permit applicants.

3. Creation of the reservations: Currently, groundwater withdrawals via exempt wells in the Stillaguamish River or its tributaries are subject to the requirements in RCW 90.44.050. Under the proposed rule, water from permit-exempt wells for domestic, small businesses and stockwatering will still be available via the reservations, but comes with some restrictions. Under the reservation, only domestic uses will be allowed year around. For businesses that would typically use a relatively small amount of process water (up to 5,000 GPD), domestic needs of the business could be met from the reservation and if the business is located in areas with partial closures an interruptible right would still be available during open periods. For businesses developing land for residential construction or requiring domestic water only, the reservation should meet that need although outdoor use will be restricted to irrigation of 1/12th of an acre per residence.

The creation of the stockwatering reservation will likely provide year-around access to groundwater for new stockwatering uses. Currently, water that would be accessed via permitted wells in continuity with the river or its tributaries is likely to be conditioned on instream flows, so this is likely to be a benefit to this industry.

4. Connection requirements: Applicants within a public water system service area who desire water from the reservation will be required to connect to a public water system if connection is timely and reasonable. In general, this will impact those desiring to use water for domestic needs or process water. This may be an impact to some businesses in

¹ Currently, permit-exempt well users can used up to 5,000 GPD during all periods assuming they meet the other requirements of chapter 90.44 RCW.

the area.² An exception might be a business that doesn't require water during low flow periods, but this is likely to be a small subset of future businesses in the watershed. The proposed rule also requires those that get water from the reservation to connect to a public water system if connection becomes timely and reasonable. This may impact some businesses if they install a well and must connect later.

5. Transfers: Water right transfers that would have occurred before the rule even though they may have impaired instream flows will no longer be allowed. This may be a cost for those that would have transferred water. However, only two transfers of any kind for small quantities have been recorded previously. Therefore, it seems reasonable to conclude that this impact will be small. Transfers of water rights may become part of mitigation strategies used by businesses to offset the impacts of their new water needs.

6. Impacts to businesses depending on instream flows

Creation of the reservation, stream closures, and restrictions on withdrawals from lakes and ponds should all serve to reduce the amount of water that would have been withdrawn without the rule. This could potentially be a beneficial impact to ecosystem services and recreation, and could impact property values. For businesses that provide guide services such as rafting, fishing and bird watching, or those dependent on dilution for waste removal, there could be a very minor beneficial impact. However, it is anticipated that the business benefits of a reduced depletion in flows will be very small due to the small quantities of water involved.

7. Impacts to existing permitted water rights

Increasing requirements for future water rights may increase the value of existing permitted water rights to some businesses.

COST ANALYSIS

The following cost analysis (as required in RCW 19.85) is provided:

Reporting and Recordkeeping: No additional reporting or recordkeeping is likely to be required.

Additional Professional Services: Additional professional services including hydrogeological expertise and engineering design and surveying may be required if technical services are required to provide technical documentation of a water transfer or a water line extension must be designed. Closures in basins may lead some to transfer water rights or lease from others. This will likely require increased use of professionals including hydrogeologists, biologists, engineers, and attorneys. The exact requirements would depend on the river or stream, proposed change, etc. Mitigation options might involve construction of storage tanks and associated piping requiring engineering design services. Anyone required to connect to a public water system would likely require additional engineering design and surveying.

² Other entities may already require connection. For example, the Skagit County Critical Areas Ordinance requires connection to public water systems to protect low flows under specific conditions.

Costs of Equipment, Supplies, Labor, and Increased Administrative Costs: Increased equipment associated with pipeline and tank construction may be required for mitigation options but is included in the descriptions below.

Other Compliance Requirements: Restrictions on water use from lakes and ponds may require some businesses to obtain groundwater rights through the reservation or potentially install storage or mitigate another way. The exact impact will depend on the number of proposed water rights, and the volume and time period in which water is required. A review of past surface water rights issued to business entities indicate that none have been issued since 1985.³

Basin closures will impact those that would have applied for an interruptible water right since they will now not be issued a water right in fully closed basins unless they can mitigate, or demonstrate no impacts on instream flow. In general, it is difficult to determine the cost impact of this requirement since it depends on the number of surface water withdrawals or wells proposed to be installed in the future, the required quantity of water, and cost of other options such as purchases or leases of existing rights. For businesses that require water for location specific activities, this might change the highest-valued use of the land. Evaluation of past permitted uses by businesses indicates that the predominant uses are for domestic and irrigation. In these areas, domestic uses can still be served by individual wells through the reservation. Future irrigation uses would likely not be impacted too much under the proposed rule since permits would already likely be interruptible.

Costs associated with the reservation include the reduced ability to use water for outdoor use. This is considered in Section 2. The cost to connect to an existing water system will range from \$8,000-\$35,000 for those businesses required to connect. However, some of that cost (all, in some cases) will likely be returned via latecomer agreements and the applicant will avoid the cost of constructing a well which is approximately \$7,000 depending on the depth, geology, etc.⁵ After the rule is effective, those businesses that operate on a well that will be required to connect to an expanding water system, costs are likely to vary between \$8,000 and \$35,000 for connection, but there will be an increased cost to abandon the existing well. In general, it would seem likely that businesses would find it in their interest to connect to an existing water system under the requirement.⁶

The cost associated with reducing any transfers will be the difference in value the proposed user and seller placed on the water. This will vary with the applicants, water uses, transfer conditions, value of water in the business product and the businesses.

2. REVENUE IMPACTS AND DISTRIBUTION OF COSTS

³ This would not include water rights issued to individuals for business purposes.

⁴ Since 1985, Ecology annually issues approximately 1 permit to business entities with the majority of those issued prior to 1996.

⁵ Cost estimate assumes 60 foot deep well through sand and gravel.

⁶ The existing rule also negates this requirement if costs are more than double the cost of constructing a well.

INTRODUCTION

RCW 19.85.040 requires that additional analysis of impacts be provided. Specifically, the analysis should include whether compliance with this rule will cause businesses to lose sales or revenue and whether the proposed rule will have a disproportionate impact on small business. This section evaluates the proposed rule in light of these requirements.

REVENUE IMPACTS

Increased compliance costs for businesses will likely impact those that require water for their processes or that will rely on permit-exempt wells for land development. Some additional costs may also be imposed for those businesses that are required to connect to public water systems. The rule will only affect future water rights and transfers and in most cases the impact will be borne by those businesses that own property with the potential to be developed. Firms that develop land for their own use or for sale as residential land may experience a reduction in land value associated with the reduced availability of water. The estimated cost of outdoor use restrictions to users of permit exempt wells is likely to be between \$3 and \$35 per year per well. Capitalizing this over time yields a reduction in value of between \$44 and \$545 per well. This is the lost revenue that would be experienced by any firm that owns developable property likely to be served by an exempt well. For those business using conditioned water right permits, the restrictions on use during low flows will impose a cost varying with the volume and use forgone. Other impacts (e.g. connection requirements, restriction on transfers, etc.) will also tend to raise costs. To the extent that increased costs yield increased prices, gross revenues will likely be reduced.

DISTRIBUTION OF COMPLIANCE COSTS

The impacts of the proposed rule related to the reservation and closures will likely be experienced by existing property owners without existing water rights. Assessing the impact of the rule and proportionality for small and large business involves evaluation of the ownership structure of existing parcels in the watershed. To determine proportionality, all existing properties within the watershed were analyzed. The number of business-owned developable properties was determined, and this was evaluated to determine those likely to be served by exempt wells in the future. The result was a record of existing business owners, parcel size and current land use and zoning that allowed for projection of the number of wells that could be developed. The ownership data was then matched with Washington State Employment Security (ESD) Records to determine the size (i.e. number of employees) of firms. This allowed for an analysis that evaluated alternative development scenarios. It is possible that no land would be developed, that all is developed or any of a multitude of combinations in between. The results assuming full-development by all business-owned parcels is provided in Table 2.1.

⁷ Calculation assumes a 2.7% real discount rate. Discussion of this calculation can be found in the benefit-cost analysis.

⁸ Business-owned developable parcels make up approximately 22% (Skagit County) and 21% (Snohomish County) of the total area in the counties located in the watershed.

Table 2.1. Compliance Costs for Business-Owned Exempt Well Development

	Number of Firms ⁹	Average Employment (No. of Employees)	Average Cost per Employee ¹⁰ (\$)	Median Cost Per Employee (\$)
Small Firms	55	6-15	\$580-\$7,183	\$70-\$863
Large Firms	17	475-795	\$2-\$19	\$2-\$19

As can be seen from above the impacts appear to be greater on a cost per employee basis for smaller firms than for larger firms with a cost/employee ratio for small to large firms of 1:35 using the median cost per employee. This result is conditional on all parcels developing the maximum number of exempt wells. If firms develop the same number of wells or if small firms are the only firms to develop, then the costs would also be disproportionate. If large firms were the only to develop, then this may not be the case. ¹¹

An analysis was also carried out to determine the proportionality of impacts on permitted surface and groundwater users. It determined that all businesses that previously applied for permits for surface or groundwater use (since 1985) were small firms. Other cost impacts such as professional services, etc. are likely to be higher cost (on a per employee basis) for small firms than for large.

CONCLUSIONS

As described above, there will likely be an impact to some businesses in the watershed from the proposed rule. It is likely that some firms will experience increased compliance costs associated with restrictions on water use, increased metering requirements, and water line extension costs. In general, the impacts are likely to be disproportionately borne by smaller firms as measured on a cost per employee basis.

3. ACTIONS TAKEN TO REDUCE THE IMPACT ON SMALL BUSINESS

As described above, the proposed rule could lead to impacts that could affect some of the businesses in the watershed. It appears this may disproportionately impact small businesses. In crafting the proposed instream flow rule, Ecology has actively attempted to reduce, modify or eliminate substantive regulatory requirements to all entities in the watershed. For example in a previous draft of the rule, Ecology considered prohibiting all outdoor uses of water during low flow periods. The proposed rule allows some outdoor watering which will reduce the impacts to small businesses proportionately more than large businesses. There are no recordkeeping or reporting requirements or inspections and compliance timetables and fine schedules were not altered.

⁹ The total number of firms represents all businesses located in the county listed as owner of the parcel and where ESD data could be located.

¹⁰ Cost comparisons use the largest 10% of firms required to comply.

¹¹ For Skagit County, the firm size and cost structure is such that all possible development scenarios involving at least one small parcel developing for the parcels considered result in disproportionate impacts.

4. HOW WAS SMALL BUSINESS INVOLVED IN THE DEVELOPMENT OF THIS RULE?

This rule has been developed over a long period with substantial public involvement. Several public meetings were held to discuss the language and the proposed rule was posted on Ecology's website. The filing of the CR-102 will provide for official public hearings to consider the rule and an opportunity for the business community to provide input.

5. LIST OF INDUSTRIES REQUIRED TO COMPLY

No industries are required to comply with the proposed rule unless they seek to obtain new water rights in the covered area. However, requirements affecting water use are likely to translate into changes in property values based on impacts to the highest valued uses in the watershed. As such, existing business owners of undeveloped property are likely to be the industries that will be required to "comply" either directly in terms of attempting to acquire water or indirectly in terms of changes in asset values. Therefore, the following list is provided indicating Standard Industrial Codes (SIC) codes for existing developable properties in the Stillaguamish watershed 12 and based on previous water right permit data.

Table 5.1. Industries Likely Required to Comply with the Rule

Table 5.1. Industries Likely Required to Comply with the Rule					
SIC Code	Description	SIC Code	Description		
1442	Construction sand & gravel	5154	Livestock		
1521	Single-family housing	5193	Flowers & florists' supplies		
	construction				
1794	Excavation work	5261	Retail nurseries and garden stores		
2011	Meat packing plants	5261	Retail nurseries and garden stores		
2038	Frozen specialties, nec	6021	National commercial banks		
2411	Logging	6211	Security brokers and dealers		
2421	Sawmills and planing mills, general	6531	Real estate agents and managers		
2621	Paper mills	6552	Subdividers and developers, nec		
2653	Corrugated and solid fiber boxes	7032	Sporting and recreational camps		
2676	Sanitary paper products	7999	Amusement and recreation, nec		
4011	Railroads, line-haul operating	8051	Skilled nursing care facilities		
4612	Crude petroleum pipelines	8121	Unassigned		
4911	Electric services	8322	Individual and family services		
4941	Water supply	8399	Social services, nec		
4952	Sewerage systems	8611	Business associations		
5031	Lumber, plywood, and millwork	8641	Civic and social organizations		
5032	Brick, stone and related materials	8661	Religious organizations		
5099	Durable goods, nec	8731	Commercial physical research		
5114	Unassigned	8733	Noncommercial research organizations		

¹² The table was constructed based on data provided by the Skagit and Snohomish County Assessors and by the Washington State Employment Security Department.

APPENDIX A-REFERENCES

- 1. AWWA Research Foundation, <u>Residential End Uses of Water</u>, American Water Works Association, 1999
- 2. Economic and Engineering Services, Inc., <u>North Snohomish County Coordinated</u> Water System Plan, 1991
- 3. RS Means, Building Construction Cost Data, 55th Annual Edition, 1997
- 4. Skagit County, Skagit County Comprehensive Plan, 2003
- 5. Snohomish County, <u>Snohomish County Permit Search</u>, <u>http://198.238.192.103/pds/pdskiosk/PDS-SearchPN.asp</u>, Accessed 2004

APPENDIX B-RULE ANALYSIS

INTRODUCTION

Ecology anticipates that a significant portion of the proposed rule's implementation will be related to water rights and water management. Water rights and water management are governed by a series of statutes and court cases. Compliance with the rule will occur primarily within the context of complying with state water laws. Evaluating the impacts of the proposed rule involves describing the baseline from which the change caused by the rule is measured. The baseline includes water right administration for both new and changes of water right applications under chapters 90.03 and 90.44 RCW and case law. It also includes the use and development of water by permit exempt wells pursuant to RCW 90.44.050. For the consideration of instream values, chapter 77.55 RCW and current implementation of chapter 90.22 and 90.54 RCW as they relate to water rights and water management is also part of the baseline.

In proposing the creation of the reservations of water, and establishing instream flows, the rule creates a mechanism that allows for future uninterruptible domestic water uses and stockwatering. In the case of the stream closures, the proposed rule's effect will likely be on future determinations of water availability. Consideration of water availability is part of the water right application process. The four-part test for a water right from RCW 90.03.290 remains unchanged and includes examination of water availability. The proposed rule will quantify water availability for some uses through the reservation and establish new water rights for this watershed. Conditions may be imposed on a future water right to implement the rule. How the proposed rule changes consideration of requests for new water and or changes to water rights and in particular how environmental values are reflected in the decisions prior to and after the rule are described below.

BASELINE DEVELOPMENT

Under State water law, the waters of Washington collectively belong to the public and cannot be owned by any one individual or group. Proposed diversions of any amount of water for any use from all surface or groundwater sources require a water right be obtained. A water right is a legal authorization to use a certain amount of public water for a designated purpose. A water right is also necessary if you plan to withdraw more than 5000 gallons of ground water.

An application for a ground water right permit is not required if your daily ground water use from a well or wells will be 5,000 gallons a day or less for any of the following combinations of uses:¹³

- Stock-watering.
- Single or group domestic purposes such as drinking, cooking and washing.
- Industrial purposes.
- Watering a lawn or noncommercial garden that is a half acre or less in size.

¹³ Publication #F-WR-92-104.

Although the law allows an exemption from the water right permit process in these cases, all other water laws and regulations still apply to these uses.

Washington water law requires users of public water to receive approval from the state prior to the actual use of water. Approval to put water to beneficial use is granted in the form of a water right permit. The proposed use must meet four primary requirements (known as the "four-part test") in order for Ecology to issue a water right permit:

- 1. The water will be put to beneficial use;
- 2. There will be no impairment to existing rights;
- 3. Water is available; and
- 4. The water use will not be detrimental to public welfare.

Ecology conducts an investigation of the application to confirm the information on the application and applies the four-part test mentioned above. In applying this four-part test, some of the facts Ecology considers are based on the particular water source, existing water rights, and watershed. These include the instream flow recommendations made in the past, instream flow rules (if they exist) and whether and how groundwater is connected to surface water sources. The results of the investigation and four-part test review are summarized in a report of examination (ROE). The ROE contains Ecology's staff-level decision on a water right request. Ecology can recommend a denial, an approval, or an approval with conditions. Once approved by an Ecology decision-maker, Ecology issues a final ROE and orders approving the ROE. If approved, the permit will likely have specific conditions.

Instream flow considerations within water right application administration has been the law since 1949 (See RCW 77.55.050). Generally, a flow of water sufficient to support game fish and food fish populations must be maintained at all times in the streams of this state. Under that statute, Ecology sends copies of water right applications to the Washington Department of Fish and Wildlife (WDFW) to see if approving the proposed withdrawal would compromise game and food fish populations. In 1969, by adoption of Chapter 90.22 RCW (Minimum Water Flows and Levels) and again in 1971, by adoption of the Water Resources Act, the Legislature added additional policies for instream flow considerations and the instream flow rule program. Instream flows once adopted by rule are water rights protected from impairment from those rights junior in priority date to the instream flows (RCW 90.03.345). Ecology is prohibited, by statute, from allowing withdrawals of water that conflict with an instream flow regulation, unless there is a clear showing of overriding consideration of public interest (RCW 90.54.020(3)(a)). Numerous water sources in WRIA 5, about 30% of the basin, are listed on Ecology's Surface Water Source Limitation List (SWSL) based on past comments of resource agencies pursuant to RCW 77.55.050.

The consideration of a proposed withdrawal's impact on fisheries resources and flow is performed by professional fisheries biologists based on professional judgment using the existing data and/or knowledge of the basin. If there is concern that approval of use might

compromise instream values, an application can either be denied or approved with use conditioned on minimum flow levels. A junior water right must stop use, if a senior right is not satisfied. Consequently, rights conditioned upon minimum flow levels are interruptible water rights that must be discontinued during times when streamflows are below the established flow value. In the case of the Stillaguamish River, there is no existing in-stream flow rule in place and water is currently allocated according to existing water law. The current water management program can be broken down as follows:

Surface Water Allocations (water right permit)

New applications for surface water rights are forwarded to the WDFW for review and comment. The four-part test is applied. If there is a concern that water uses might adversely impact fish, WDFW will recommend that the right not be issued or that any use granted be conditioned on minimum flows. In most cases Ecology will accept WDFW's recommendation and condition the right in such a way that flows are protected. A permit is approved granting an interruptible right.

Groundwater Allocations (water right permit)

New applications for ground water rights are, generally, subject to the same requirements as for surface water rights. All applications are reviewed by WDFW. The four-part test is applied. If there is a concern that water uses might adversely impact fish, for example due to hydraulic continuity, WDFW will recommend that the right not be issued or that any use granted be conditioned on minimum flows. In most cases, Ecology will accept WDFW's recommendation and condition the right in such a way that flows are protected. The impact of a ground water withdrawal on a surface water body (stream or lake) through hydraulic continuity is generally estimated based on aquifer characteristics and accepted hydrogeologic study methods.

Historically few approved ground water uses were issued interruptible with a condition on instream flows. After the 1980's that practice changed. The science of ground water development and tools for assessing ground water flow became more advanced. Moreover, Ecology's understanding of the law on ground water hydraulic continuity was shaped, in part, by the Supreme Court's decision in *Postema v. Ecology (2000)*. Now a ground water development's impact to existing wells and surface water sources is evaluated within the impairment analysis.

Groundwater Allocations (permit exempt)

New ground water can be obtained from permit-exempt wells under specific conditions (RCW 90. 44.050). The groundwater permit exemption is an exemption from a water right permit application; all other water laws and regulations still apply. Currently, the local health district and building permit officials determine when permit exempt wells can be used. In general, there are few restrictions on location except for sanitary setbacks.

As a water right, use of a permit exempt well can be regulated in favor of senior rights if it impairs an existing right, including instream flows. Historically, Ecology has rarely regulated these water rights to protect senior water rights.

Changes or Transfers of Water Rights (Water Right Permits)

Existing water rights can be changed or transferred pursuant to chapters 90.03 and 90.44 RCW.

Reservations of water

There is no existing reservation of water within WRIA 5.

Closures of water sources in WRIA 5

There are currently several streams listed on Ecology's SWSL list that would either be denied or conditioned on low flows in WRIA 5. Closures are based on a finding of no water availability, generally because the available supply has been fully allocated.

RULE IMPACTS TO WATER RIGHT ADMINISTRATION

The future water right management program under the proposed rule can be broken down as follows:

Surface Water Allocations (water right permit)

Before Ecology can approve a water right application for a new public water system, the applicant must provide sufficient documentation that no other public water system can provide water in a timely and reasonable manner. If domestic water can be provided in a reasonable and timely manner by some other public water system, Ecology shall reject the water right application.

New applications for surface water rights will still be forwarded to the WDFW for review and comment and the four-part test will be applied. In cases where the proposed withdrawals may impact instream needs, WDFW will recommend that the right not be issued or that any use granted be conditioned on the proposed rule's minimum flows. In most cases Ecology will accept WDFW's recommendation and condition the right in such a way that flows are protected.

Under the proposed rule, all new water rights will be "junior" to the published instream flow values and be required to stop withdrawals when minimum flows are not met in the surface water source. In general, this is not likely to represent a significant change for future proposed surface water withdrawals because prior to this rule, the water right applications were evaluated by WDFW for instream flow considerations and usually conditioned. Applications for new surface water rights from closed sources would be denied, unless the applicant proposed mitigation of the water use or the use was approved subject to over riding considerations of the public interest. For those areas currently closed (on the SWSL), this would represent no change from the current situation. For areas that are not currently closed, this may represent a change. The rule will ensure uniformity and consistency in flow determinations and resultant instream flow provisos.

The rule will close all lakes to consumptive water use, except for single domestic supply. For single domestic supply, in-house use only will be required.

Groundwater Allocations (water right permits)

Before Ecology can approve a water right application for a new public water system, the applicant must provide sufficient documentation that no other public water system can provide water in a timely and reasonable manner. If domestic water can be provided in a reasonable and timely manner by some other public water system, Ecology shall reject the water right application.

New applications for ground water rights are, generally, subject to the same requirements as for surface water rights. The four-part test is applied. All applications will still be reviewed by WDFW and if there is a concern that water uses might adversely impact fish, WDFW will recommend that the right be so conditioned as to provided for in the instream flow rule. In most cases, Ecology will accept WDFW's recommendation and condition the right in such a way that flows are protected. The impact of a ground water withdrawal on a surface water body (stream or lake) through hydraulic continuity will generally still be estimated based on aquifer characteristics and accepted hydrogeologic study methods. If the proposed appropriation were to capture water, that would otherwise contribute to instream flows, the permit approval would be conditioned as interruptible to protect against impairment of the instream flow right.

Applications for new ground water rights from closed sources would be denied, unless the applicant proposed mitigation of the water use or the use was approved subject to over riding considerations of the public interest. For those areas currently closed, this would represent no change from the current situation. However, for areas that are not currently closed, this may represent a change since new ground water rights would be denied, unless the applicant proposed mitigation of the water use or the use was approved subject to over riding considerations of the public interest.

As mentioned above, groundwater rights are subject to the same requirements as for surface water rights. However, in the past, groundwater rights have not been conditioned due to the difficulty in knowing impacts to surface sources based on the degree of continuity. The proposed amendment clarifies the applicant's responsibility in demonstrating that groundwater extraction will not impair other rights. However, the impact created on the surface water source via hydraulic continuity is not necessarily impairment. A separate statutory requirement exists to analyze the possibility of impairment from withdrawals of ground and surface waters in continuity. This proposed amendment and the existing rule do not affect this statutory requirement.

Groundwater Allocations (permit exempt)

Some portions of the Stillaguamish basin are closed to new ground water development during some periods of the year under the proposed rule, with exceptions provided for in the rule. The reservation of permit-exempt ground water for future domestic, small business, and public water supply uses will provide for a management framework for these types of withdrawals. Because access to the reservations requires local governments to take certain steps, one of the most significant factors influencing impacts from the proposed rule is whether the local governments enact an ordinance or other administrative action to effectuate the reservation. If an agreement or ordinance is not put in place by local governments, then no reservation water is available. The analysis below

assumes that local governments complete the required agreement or ordinance. The Appendix discusses the case where no ordinance is promulgated.

If there is no reservation in effect, and certain streams or basins are closed to new appropriation, then no new permit exempt wells would be drilled in those areas. If the reservation is in effect, and water is being used, there are still several water management conditions that may have an impact on water use including restrictions on outdoor use.

For individuals and business entities, there are several alternatives. Applicants may choose as a first order of business to solicit a hydrogeologist to certify that a well would not cause an impairment of a water right in those areas where hydraulic continuity is unlikely. This would allow an applicant to develop a well without the limitations imposed by the existing rule's instream flows and without the limitations imposed by the proposed amendment. However, the applicant would bear the additional cost of the analysis. For some wells in basins that drain groundwater to saltwater bodies, the cost for hydrogeologic consultation would likely be very small. For those applicants wishing to use water in areas with a likelihood of hydraulic continuity and consequently, impairment of instream flows, they could get water from the reservation or accept an interruptible water right.

Obtaining water from the reservation requires that an applicant be located more than 500 feet from an existing water system and within the service area of the public system. If an applicant is closer than this, then they will be required to connect to a public water system if the connection can be made available in a timely and reasonable manner. Those outside the 500 foot limit that choose to utilize a well and the reservation will be required to connect to the public water supply system if water service becomes timely and reasonable.

Changes or Transfers of Water Rights

Existing water rights can continue to be changed or transferred pursuant to chapters 90.03 and 90.44 RCW. Changes to surface water rights and transfers of point of diversion downstream or upstream on a source will now include consideration and potential restrictions due to the instream flow right proposed in the rule. Changes in point of diversions from a surface point to a ground water point from the same water source will probably not be impacted by the rule.

Reservations of water

The reservation of water, use of water under the reservation and associated conditions for that use are all new proposals. In large measure, the reservation will allow use of permit-exempt wells without them being subject to the instream flow right. These uses are subject to limitations on outdoor watering and other conditions. Use of water under the domestic use reservation is conditioned as follows:

- (a) The water reserved shall be for ground water uses exempt from a water right permit application pursuant to RCW 99.44.050.
- (b) The quantity of reserved ground water is limited to be 5 CFS spread across the basin.

- (c) Domestic water use shall meet the water use efficiency standards of the uniform plumbing code as well as any applicable local or state requirements for conservation standards.
- (d) This reservation shall only be available for use in areas governed by a county ordinance or other administrative action that sets forth the same requirements as subsections a, b, c, e, f and g of the proposed WAC 173-503-073(2) as conditions on a water availability determination based upon the reservation, issued pursuant to RCW 19.27.097 and RCW 58.17.110.
- (e) Water use under this reservation is not allowed in those areas where a public water system has been established pursuant to RCW 43.20.260, and where the connection can be provided in a timely and reasonable manner. A "timely and reasonable manner" means potable water service can be provided by a purveyor within 120 days of a written request for service, to a property located within the public water system and 500 feet of the purveyor's water pipe line.
- (f) Use of water under the reservation shall not continue in those areas where a public water system has been established pursuant to RCW 43.20.260, and where the connection can be provided in a timely and reasonable manner for those entities who previously did not meet subsection (e) above. The department shall consult with the water purveyor to determine water availability. Any such person must take affirmative action to connect to the public water system no later than 120 days after receiving the department's written order to cease and desist use of the well or surface water source.
- (f) Outdoor irrigation shall be limited to an area not to exceed a total of $1/12^{th}$ of an acre and under all circumstances, total outdoor watering for six or more residences under the permit exemption (RCW 90.44.050) shall not exceed ½ acre.

If the proposed rule amendment goes into effect, then use of the permit-exempt well water will now be obtained from a reservation if year-around use is desired. Businesses that elect to install permit exempt wells for their own moderate needs or to develop saleable land will face more choices as to their best option. Under the proposed rule, the project proponent may choose other methods of water well development (for example drilling to deep aquifers) to meet their needs and avoid limitations imposed by the rule.

The rule amendment also proposes a future stock watering reservation for stock water as directed by RCW 90.22.040. Future stock watering in the proposed rule is accessed via either a diversion structure or wells and relates to normal grazing activities for the surface water use. In addition, RCW 90.44.050 provides an exception to the requirements for a ground water right permit for stockwater. The rule sets a volume limit on this use of water but otherwise does not change the existing situation.

Closures of Water Sources in WRIA 5

The proposed rule will include most of the current limitations on water withdrawals based upon the SWSL list but also adds to them. Ecology anticipates denying applications from closed sources unless the applicant can mitigate for the impacts or they can accept an interruptible right. Denial or conditioning on low flows was true before the proposed rule, but after the rule becomes effective the areas subject to closure will enlarge.

Maximum Allocation

There is also a maximum allocation proposed for those periods of the year that the streams and rivers will be open.

PROPOSED RULE (CHAPTER 173-505 WAC)

The complete rule language for "Instream Resources Protection and Water Resources Program-Stillaguamish River Basin Water Resources Inventory (WRIA) 5" can be found in proposed Chapter 173-505 WAC. The following provides a brief description of the proposed rule and a further discussion of those specific rule provisions that may impact instream flows and/or out-of-stream uses of water.

Chapter 173-505-010 General Provisions-Authority and Applicability

This rule is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (Minimum Water Flows and Levels), and chapters 18.104, 90.42 and 90.44 RCW along with chapter 173-500 WAC (Water Resources Management Program). The rule applies to all future uses of surface water and groundwater hydraulically connected to those surface waters within the Stillaguamish River Basin, also known as Water Resources Inventory Area (WRIA) 5.

Conclusion: No significant economic impact.

<u>Chapter 173-505-020 Purpose</u>

The purpose of the proposed rule is to retain perennial rivers, streams and lakes within the Stillaguamish River basin to protect and preserve instream values, to create a reservation and to set forth the department's policies.

Conclusion: No significant economic impact.

Chapter 173-505-030 Definitions

See the proposed rule.

Conclusion: No significant economic impact.

Chapter 173-505-040 Establishment of Stream Management Units

This section defines control points and the location of the stream management units for the mainstem and north and south forks of the Stillaguamish River and other tributaries.

Conclusion: No significant economic impact.

Chapter 173-505-050 Instream Flows

This section establishes the specific minimum instream flows required for WRIA 5. The flows will be water rights with a priority date of the rule and will be measured on a biweekly or monthly basis for specific control points. These flow standards will be the basis for determining when instream flow levels are not being attained and when junior water users (whose use influences flows) will be required to reduce or curtail use. All

water rights granted after instream flows are established will be considered "junior" to the specified instream flows.

The proposed rule will apply to all waters within the Stillaguamish River basin (WRIA 5). Specific instream flow standards are set for the Stillaguamish River mainstem, the north and south forks of the Stillaguamish and many tributaries. Minimum flows are also set for several small streams.

Conclusion: Setting minimum instream flows might reduce the availability of water for future appropriations. This may have significant economic effects-See "Rule Impacts to Water Right Administration."

Chapter 173-505-060 Lakes and Ponds

The proposed rule will limit use of water from all lakes and ponds to single in-house domestic uses not to exceed one hundred and fifty gallons per day per home.

Conclusion: Restrictions on use may limit the ability of some future water users to obtain water. This may have significant economic effects-See "Rule Impacts to Water Right Administration."

Chapter 173-505-070 Stream Closures

The proposed rule will close all streams and tributaries in the basin to new consumptive uses except for some periods of the year. Watershed areas contributing groundwater to these areas are also closed to new consumptive water withdrawals. All unappropriated water is to be appropriated for protecting and preserving instream values. Some water is available for appropriations during some periods of the year.

Conclusion: Closing the streams and rivers could have impacts on future water users which may have significant economic effects, but exceptions may limit the impacts-See "Rule Impacts to Water Right Administration."

Chapter 173-505-080 Future Stock Watering

Ecology will reserve 1 CFS of surface water and 2 acre-feet of groundwater for future stock watering in the proposed rule accessed via either diversion structures or wells and related to normal grazing activities.

Conclusion: Reservation size was set to meet all future riparian stockwatering areas and access will be allowed essentially the same as before the rule. Surface water users will be able to get an uninterruptible right. Groundwater users will likely not be substantially affected. Significant economic impact may occur- See "Rule Impacts to Water Right Administration."

<u>173-505-090</u> Reservation of Permit-Exempt Ground Water for Future Domestic Uses
The proposed rule provides for establishment of a reservation of water for domestic uses
including the human health requirements of businesses on a year round basis. This would
include a maximum allocation of 2 CFS in the north fork and 1.5 CFS in the south fork

subject to several conditions. A total allocation of 5 CFS is available. This water shall be reserved for single or small group domestic uses exempt from a water right permit application.

Efficiency standards for the reservation will require that water use meet the Uniform Plumbing Code and local conservation standards, and that the local governments execute an ordinance or other administrative action that indicates they will make a good faith effort to comply with the rule and require connection to public water systems when timely and reasonable. Use of the reservation will not be allowed if water can be provided by a local purveyor in a timely and reasonable manner. Wells that acquire water under the reservation shall stop pumping and connect to an expanding system if water becomes available at some time in the future. Outdoor watering will be limited to an amount for $1/12^{th}$ of an acre for each individual domestic use for all outdoor uses. Specific accounting criteria for use of reservation water are also proposed.

Conclusion: Requirements for connection and restrictions on use are likely to have an economic impact. The requirement that local governments adopt an ordinance prior to the reservation being established may delay or pre-empt reservation establishment. See "Rule Impacts to Water Right Administration."

Chapter 173-505-100 Maximum Allocation

A maximum allocation from certain rivers and streams is also proposed for those periods of the year that the streams and rivers will be open. This will apply to the mainstem, north and south forks and Pilchuck, Squire, Jim and Canyon Creek.

Conclusion: This is unlikely to be a limit on future development in the basin. No significant economic impact is anticipated.

Chapter 173-505-110 Future Permitting Actions

Applicants must demonstrate that any available public water systems cannot provide service in a timely and reasonable manner. If it is available, permits will be denied. Future water availability will be very limited and un-restricted use will only be allowed during closed periods if the proposed use is non-consumptive, the source not in continuity, the use mitigated or the applicant proposes storage. Some salmon recovery projects may be approved. Mitigation is encouraged and will be evaluated on a case by case basis. All future surface and groundwater permit holders will be required to provide measurement devices and report the use data.

Conclusion: Some potential impacts to future water right applicants. Metering requirements are not a change from current requirements. See "Rule Impacts to Water Right Administration."

173-505-120 Alternative Sources of Water

The department encourages the use of alternative sources of water. These may be important as potential mitigating projects when a water use is proposed.

Conclusion: No significant economic impact.

173-505-130 Establishment of Trust Water Rights Program

A trust water rights program will be established to facilitate the acquisition of water rights. No additional program set-up costs are anticipated.

Conclusion: No significant economic impact.

173-505-140 Future Changes and Transfers

Transfers will only be allowed if they don't conflict with this chapter

Conclusion: This may restrict transfers that would have occurred absent the rule. This may have a potentially significant economic impact. See "Rule Impacts to Water Right Administration."

173-505-150 Compliance and Enforcement

To obtain compliance, the department shall produce and distribute technical and educational material. The department will first attempt to get voluntary compliance.

Conclusion: Preparation of educational materials will involve costs.

173-505-160 Appeals

All decisions can be appealed to the pollution control hearings board

Conclusion: No significant impact

173-505-170 Regulation Review

This rule may be reviewed and revised.

Conclusion: No significant impact

173-505-180 Maps

Conclusion: No significant impact

APPENDIX C: IMPACT IF RESERVATION IS NOT IMPLEMENTED

There is a possibility that even if the proposed rule goes into effect, that the local governments will not enact an ordinance or take other administrative action to make the reservation available within their jurisdiction. If so, then the reservation will not be available within those jurisdictions. Therefore, the business impacts will be as follows:

- 1. Lake and pond consumptive withdrawal restrictions: Surface withdrawals from all lakes and ponds will be limited to single in-house domestic uses not to exceed 150 gallons per day per home under the proposed rule. Currently, applicants would likely get a right to a larger quantity of water but be required to reduce use to in-house domestic during low flow events in the distributary. The in-house use only limitation under the rule may impact some businesses desiring access to these sources or developing residential lots. Businesses will not be able to access more water from the proposed reservations. The exact impact of this will depend on the number of permit requests that would have been submitted absent the rule.
- 2. Stream closures: All rivers and streams and the groundwater in continuity with them that are currently open to new withdrawals (or currently closed) will be closed. Domestic uses (human needs of a household or business) and stockwatering would legally be required to eliminate use during the closure periods and would be required to provide storage to have water during the closure periods. This requirement will generally eliminate new water withdrawals during certain periods of the year. New withdrawals may still be available when non-consumptive, fully mitigated during closure periods, or from groundwater shown to not affect surface water. In these areas, water uses will be required to obtain water during closure periods from an existing water purveyor, through leases or transfers or through other methods. For those businesses that require water for irrigation or for agricultural/industrial processes, this might be an impact on future withdrawals since the closure will require some mitigation or storage. However, it is reasonable to conclude that these water rights would be conditioned on low flows absent the rule. As such, the impact would likely be a longer period of non-use that will occur every year. This could require water leasing or transfers of existing water rights or could lead to a change in the proposed location of a commercial industry or agricultural use. The magnitude of the impact will be determined by the proposed location and use of future water permit applicants.
- 3. Transfers: Water right transfers that would have occurred before the rule even though they had an impact on instream flows will no longer be allowed. This may be a cost for those that would have preferred to trade water. However, only two transfers of any kind for small quantities have been recorded previously. Therefore, it seems reasonable to conclude that this impact will be small.

4. Impacts to businesses depending on instream flows

Stream closures and restrictions on withdrawals from lakes and ponds should all serve to reduce the amount of water that would have been withdrawn without the rule. This could

potentially be a beneficial impact to ecosystem services and recreation, and could impact property values. For businesses that provide guide services such as rafting, fishing and bird watching, or those dependent on dilution for waste removal, there could be a very minor beneficial impact. However, it is anticipated that the business benefits of a reduced depletion in flows will be very small due to the small quantities involved.

5. Impacts to existing permitted water rights

Increasing requirements for future water rights may increase the value of existing permitted water rights to some businesses.